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10/698,758	10/31/2003	John M. Rosevear	65,657-009	2619

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EXAMINER

HINZE, LEO T

ART UNIT PAPER NUMBER

2854

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,758

Applicant(s)

ROSEVEAR, JOHN M.

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20031031.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Objections

1. Claims 8-26 are objected to because of the following informalities:

It appears that the dependency of claims 8-26 is not correct. With respect to claims 8-29, it appears that: claims 8, 9, 17 and 19-26 should be dependent on claim 7; claims 10-16 should be dependent on claim 9; and claim 18 should be dependent on claim 17.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 4, 6-9, 12-16, 19-21 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eo et al, US 6,901,032 (Eo) in view of Rosevear, US 4,669,891 (Rosevear) and Parker, US 6,310,547 (Parker).

- a. Regarding claims 1 and 7:

Eo teaches a watch that displays an apparatus for displaying time comprising: a memory for storing a day sequence including time for the sunrise and sunset for each month of the year

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for a positions in a memory (col. 2, ll. 19-21); a receiver for receiving a current time; a register operatively connected to said memory and said receiver for registering a current time; and a display operatively connected to said register and said memory for presenting the current time on an analog clock face (Fig. 1). Eo teaches that the display may be an LCD or CRT (col. 4, ll 56-57).

Eo does not teach a memory for storing a day sequence including time for the beginning and ending of twilight; a receiver for receiving a current coordinate position in latitude and longitude, and a current calendar day; a register operatively connected to said memory and said receiver for registering a current coordinate position in latitude and longitude, and a current calendar day; pie-shaped sections for twilight.

Rosevear teaches a twilight clock, including a memory (20, Fig. 2) for storing a day sequence including time for the beginning and ending of twilight and sunrise and sunset for each calendar day of the year for various coordinate positions in a memory (24, Fig. 2); a receiver (16, Fig. 2) for receiving a current coordinate position by area code, a current calendar day, and a current time; a register (44, Fig. 2) operatively connected to said memory and said receiver for registering a current coordinate position by area code, a current calendar day, and a current time; and a display (12, Fig. 1) operatively connected to said register and said memory for presenting the current time on a clock face with shaded sections for twilight (64, Fig. 1). Rosevear also teaches indicating night as a dark region of the display (62, Fig. 1). Such a device allows traveling users to know the quality of the light at their destination (col. 1, ll. 17-20).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Eo to include a memory for storing a day sequence including time for the beginning and ending of twilight and sunrise and sunset for each calendar day of the year for various coordinate positions in a memory; a receiver for receiving a current coordinate position by area code, a current calendar day, and a current time; a register operatively connected to said memory and said receiver for registering a current coordinate position by area code, a current calendar day, and a current time; and a display operatively connected to said register and said memory for presenting the current time on a clock face with shaded sections for twilight as taught by Rosevear, thereby providing on the display face of Rosevear, in addition to an indication of sunrise and sunset, and indication of twilight before sunset and after sunrise that would create a shaded, pie-shaped region on the display for twilight and a dark shaded region for night, because a person having ordinary skill in the art would recognize that providing additional information in the form of twilight times would allow a traveling user to be advised of the light conditions at their destination point.

Parker teaches a programmable device that measures time (10, Fig. 2) and calculates sunrise and sunset times (12, Fig. 2) based on location data input by the user in the form of longitude and latitude or area code (col. 3, l. 63 - col. 4, l. 4).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Eo to include the ability to designate the location of the user by longitude and latitude in addition to area code, because this ability would increase the

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functionality of the device to present twilight times in places that may not have area codes, thereby making the device more commercially desirable and increasing sales and profitability.

b. Regarding claims 2 and 8, the combination of Eo, Rosevear and Parker as combined in claims 1 and 7 teaches all that is claimed as discussed in the rejection of claims 1 and 7 above, including pie-shaped sections for day and night respectively.

c. Regarding claim 9, the combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above. Eo and Rosevear also teach repositioning the pie-shaped sections at predetermined times (the indications of sunrise, sunset, and twilight must be changed at least every 24 hours, because the time of twilight, sunrise and sunset changes every day).

d. Regarding claims 4 and 12, the combination of Eo, Rosevear and Parker as combined in claims 1 and 9 teaches all that is claimed as discussed in the rejection of claims 1 and 9 above, including wherein said display is a twenty four hour analog clock (Eo, Fig. 1).

e. Regarding claim 6, the combination of Eo, Rosevear and Parker as combined in claim 1 teaches all that is claimed as discussed in the rejection of claim 1 above, including wherein said receiver is a manual input device (Rosevear, 16, Fig. 1).

f. Regarding claim 13, the combination of Eo, Rosevear and Parker as combined in claim 9 teaches all that is claimed as discussed in the rejection of claim 9 above. The combination also teaches wherein the predetermined times are noon and midnight respectively (Rosevear, "updated every minute," col. 5, l. 22; this would include updating at midnight and noon).

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g. Regarding claim 14, the combination of Eo, Rosevear and Parker as combined in claim 9 teaches all that is claimed as discussed in the rejection of claim 9 above. The combination also teaches wherein the predetermined time is midnight (Rosevear, "updated every minute," col. 5, l. 22; this would include updating at midnight).

h. Regarding claim 15, the combination of Eo, Rosevear and Parker as combined in claim 9 teaches all that is claimed as discussed in the rejection of claim 9 above. The combination also teaches wherein the predetermined time is midnight (Rosevear, "updated every minute," col. 5, l. 22; this would include updating at midnight). A repositioning of the indications for twilight, sunrise and sunset would be required daily, and, as the display shows a 24 hour period, the succeeding 12 hours would be shown.

i. Regarding claim 19, the combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above. The combination also teaches wherein registering a current coordinate position in latitude and longitude, a current date and a current time is further defined by manually inputting (Rosevear, 16, Fig. 1) the coordinate position, the current calendar date and the current time.

j. Regarding claim 20, the combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above. The combination also teaches wherein registering a current coordinate position in latitude and longitude, a current calendar day and a current corresponding time is further defined by manually inputting (Rosevear, 16, Fig. 1) the coordinate position in latitude and longitude and receiving the corresponding calendar date and corresponding time from the atomic clock.

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k. Regarding claim 21:

The combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above.

The combination of Eo, Rosevear and Parker does not teach displaying the current calendar date approximate the clock face.

Rosevear does teach that the current calendar date is known and needed to determine the correct twilight, sunrise and sunset times from the memory (“for each calendar day of the year,” col. 2, l. 1).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to additionally modify Eo to include a display of the calendar date, because this information is known, the CRT display is capable of displaying this data, and a person having ordinary skill in the art would recognize that displaying such data would increase the functionality and utility of the device, thereby making it more commercially desirable, thereby leading to higher sales and profitability.

l. Regarding claim 23:

The combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above.

The combination of Eo, Rosevear and Parker does not teach displaying the current coordinate position approximate the clock face.

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Rosevear does teach that the current coordinate position is known and needed to determine the correct twilight, sunrise and sunset times from the memory (“for various geographical locations,” col. 2, l. 1).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to additionally modify Eo to include a display of the current coordinate position, because this information is known, the CRT display is capable of displaying this data, and a person having ordinary skill in the art would recognize that displaying such data would increase the functionality and utility of the device, thereby making it more commercially desirable, thereby leading to higher sales and profitability.

m. Regarding claim 24, the combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above. The combination also teaches displaying the time for the sunrise and sunset approximate the clock face (Eo, Fig. 1).

n. Regarding claim 25, the combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above. The combination also teaches displaying the time for twilight approximate the clock face (Rosevear, 64, Fig. 1).

o. Regarding claim 26, the combination of Eo, Rosevear and Parker as combined in claim 7 teaches all that is claimed as discussed in the rejection of claim 7 above. The combination also teaches displaying the time approximate the clock face (Eo, Fig. 1).

4. Claims 3, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eo in view of Rosevear and Parker as applied to claims 1 and 9 above, and further in view of Cash, US 4,759,002 (Cash).

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a. Regarding claims 3 and 11:

The combination of Eo, Rosevear and Parker teaches all that is claimed as discussed in the rejection of claim 1 above, except wherein said display is a twelve hour analog clock.

Cash teaches a twelve hour clock (1, Fig. 1) that shows the time of sunrise and sunset (col. 1, ll. 59-60). Such a device is preferred to a twenty-four hour clock because twenty-four hour clocks are unfamiliar in construction, and more than a quick glance is necessary to discern time on them (col. 1, ll. 20-23).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Eo to change it into a twelve-hour clock, because Cash teaches that twelve hour clocks that show sunrise and sunset times are preferable to twenty four hour clocks, because they are more familiar and easier to read.

b. Regarding claim 10:

The combination of Eo, Rosevear and Parker teaches all that is claimed as discussed in the rejection of claim 1 above, except repositioning the pie-shaped sections continuously.

Cash teaches a twelve hour clock (1, Fig. 1) that shows the time of sunrise and sunset (col. 1, ll. 59-60). The pie-shaped section (9, Fig. 1) is continuously updated ("as the day goes on, more light colored area is exposed," col. 1, ll. 61-62). Such a device is preferred to a twenty-four hour clock because twenty-four hour clocks are unfamiliar in construction, and more than a quick glance is necessary to discern time on them (col. 1, ll. 20-23).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Eo to change it into a twelve-hour clock and to reposition the pie-

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shaped sections continuously, because Cash teaches that twelve hour clocks that show sunrise and sunset times are preferable to twenty four hour clocks, because they are more familiar and easier to read.

5. Claims 5, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eo in view of Rosevear and Parker as applied to claims 1 and 7 above, and further in view of Hepp et al., US 6,449,219 (Hepp).

Regarding claim 5, 17 and 18, the combination of Eo, Rosevear and Parker teaches all that is claimed as discussed in the rejection of claims 1 and 7 above, except the inclusion of a global positioning receiver for receiving time and location information.

Hepp teaches a time sensing device that includes a GPS receiver for updating time and location information (col. 3, ll. 6-7), which ensures that the correlation of position of the device and data relevant to the course of time is precisely maintained.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Eo to include a global positioning indicator for receiving time and position data, because Hepp teaches that such a receiver is advantageous for ensuring that the correlation of position of the device and data relevant to the course of time is precisely maintained.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eo in view of Rosevear and Parker as applied to claims 1 and 7 above, and further in view of Richins, US 5,907,523 (Richins).

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The combination of Eo, Rosevear and Parker teaches all that is claimed as discussed in the rejection of claim 7 above, except displaying the current time zone approximate the clock face.

Richins teaches a time display that shows the time zone (11-14, Fig. 1). The time zone is an important piece of time-related information that allows people to make informed decisions about planning their activities (col. 1, ll. 15-25).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Eo to display the current time zone, because Richins teaches that this additional time-related information allows people to make informed decisions about planning their activities, and would thereby increase the functionality of the watch, thereby making it more commercially desirable and producing greater profitability.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo T. Hinze
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08 December 2005



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